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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,809	11/12/2003	C. Allen Smith	KCX-62-DIV (13267.1)	6952
22827	7590	09/28/2009		
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			EXAMINER COLE, ELIZABETH M	
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			09/28/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/706,809	<b>Applicant(s)</b> SMITH ET AL.	
	<b>Examiner</b> Elizabeth M. Cole	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-12, 17-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al, U.S. Patent No. 4,722,973 in view of Stehling et al, U.S. Patent NO. 5,382,631.

Yamaoka discloses a thermoplastic elastomer composition comprising a blend of two polyolefins. One polyolefin is a hard (non-elastomeric) ethylene alpha olefin copolymer having a melt index of 0.01-100 g per cc and a density of 0.860-0.910 (see col. 6, lines 6-38) and the other is a soft (elastomeric) ethylene alpha olefin copolymer having a density of 0.863 g per cc, (see example 1). The non-elastomeric component can be present in amounts of 10-90% by weight and the elastomeric component can be present in 90-10% by weight. Yamaoka et al teaches that the elastomeric component should have a peak temperature of 60-70 degrees C. See col. 7, lines 1-12. Yamaoka differs from the claimed invention because it does not specify that the composition can be formed into nonwovens and does not disclose the claimed molecular weight distribution.

. Stehling discloses ethylene polymer blends which may comprise components having a narrow molecular distribution. See col. 6, lines 8-col. 9, line 7. Stehling teaches that the narrow molecular distribution of the blend improves the properties of the blends.

Therefore, it would have been obvious to one of ordinary skill in the art to have employed polymers which had a narrow molecular weight distribution as taught by Stehling in the blend of Yamaoka, in order to produce ordinary having improved

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properties as taught by Stehling. Stehling discloses that ethylene polymer blends can be formed into meltspun, (i.e. spunbond) and meltblown fabrics. See col. 23, line 38-col. 24, line 48. Spunbond fabrics comprise continuous filaments. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the blend of Yamaoka to form nonwoven fabrics as taught by Stehling, in view of the art recognized suitability of elastomeric blends of ethylene polymers for use in forming such fabrics.

2. Applicant's arguments filed 6/30/09 have been fully considered but they are not persuasive.

3. Applicant argues that Yamaoka teaches a density of the elastomeric component which is lower than the claimed density. However, Applicant claims a density of "about 0.865 g/cm<sup>3</sup> to about 0.889 g/cm<sup>3</sup>". Yamaoka teaches a density of 0.863 in example 1. Yamaoka does not teach a criticality of the density or teach away from using a higher density. It is reasonable to expect that a range of "about" 0.865 to "about" 0.889 would encompass a value of 0.863 and/or that a polyolefin having a density value of 0.863 would have about the same properties as a polyolefin having a density value 0.865, where the materials are otherwise the same. Since the claims recite a range and use the term "about", it would be reasonable to expect that a value which varied by 0.002 would have about the same properties as a polyolefin component having a density value within the claimed range and that such a value would be encompassed by the claimed range. .

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4. Applicant also argues that Stehling teaches away from using rubbery polyolefins to make the nonwoven fabrics and that Yamaoka et al discloses a rubbery polyolefin. However, Stehling teaches at cols 23 -24 that the polyethylene blends can be employed in any conventional operations and articles in which polyethylenes have been employed. Thus, Stehling teaches that it was known in the art to employ polyethylenes to form nonwoven fabrics. Yamaoka teaches a polyethylene polymer blend and therefore, it would have been obvious to have employed the polyethylene polymer blend of Yamaoka to form nonwovens, since such a use was conventionally known for polyethylenes.

5. Applicant argues that if the crystalline polymers of Stehling were used they would skew the melting point range of the material of Yamaoka. However, the rejection does not suggest employing the particular polymer employed in Stehling, but rather states that since both Stehling and Yamaoka are drawn to polyolefin blends the teaching of Stehling regarding the benefits of producing a blend having a narrow molecular weight distribution would have been pertinent to the invention of Yamaoka and therefore one of ordinary skill in the art would have been motivated to select the two components of the blend of Yamaoka so that they had a narrow molecular weight distribution.

6. Finally, it is noted that Yamaoka teaches a blend which comprises an elastomeric and non elastomeric component, wherein the elastomeric component can be present in amounts as low as 10 percent. Therefore, Yamaoka is not limited to a material which is completely elastomeric or rubbery.

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7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

The examiner's supervisor Rena Dye may be reached at (571) 272-3186.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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The fax number for all official faxes is (571) 273-8300.

/Elizabeth M. Cole/  
Primary Examiner, Art Unit 1794

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